

AMENDMENTS TO THE SPECIFICATION

The specification has been amended as follows:

Page 1

The following new heading has been added at line 4:

Background of the Invention

The heading at line 5 has been amended as follows:

Technical Field of the Invention

The heading at line 12 has been amended as follows:

Background Description of the Related Art

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The heading at line 1 has been amended as follows:

Disclosure Summary of the Invention

The paragraph at lines 2-7 has been amended as follows:

~~An object of this invention is to provide~~ The present invention provides an
exhaust purification device for internal combustion engine in which the exhaust
purification performance is improved by improving the accuracy of control on the
exhaust air/fuel ratio in the forcible modulation of the exhaust air/fuel ratio using a low-
cost exhaust sensor.

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The heading at line 21 has been amended as follows:

~~Best Mode of Carrying out~~ Detailed Description of the Invention

The paragraph at line 22 has been amended as follows:

First, a first embodiment of the present invention will be described.

Pages 21-22

The paragraph beginning on page 21, line 26 and ending on page 22, line 7 has been amended as follows:

In step S10, whether or not the forcible modulation is now being performed is determined. Specifically, whether or not the three-way catalytic ~~convert~~ converter 30 has reached a specific active state and the conditions for starting the forcible modulation control has been satisfied and therefore the forcible modulation control has been started is determined. If the result of the determination is No, namely it is determined that the forcible modulation is not being performed, the current execution of the routine ends. If the result of the determination is Yes, namely it is determined that the forcible modulation is being performed, step S12 is performed.

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The paragraph at lines 15-23 has been amended as follows:

As shown in FIG. 17, the output characteristic curve of the O₂ sensor 22 without a catalytic layer (dashed curve) tends to be located to the lean A/F ratio side, as a whole.

Meanwhile, the output characteristic curve of the O₂ sensor 220 with a catalyst (solid curve) is not located to one side, so that the switch point of the output characteristic curve is located at the ~~stoichiometric~~-stoichiometric A/F ratio as desired, so that the exhaust A/F ratio can be detected accurately.

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The paragraph at lines 7-28 has been amended as follows:

In the described embodiments, the time ratio, the “rich” time ratio and the “lean” time ratio are obtained in relation to the period T1 of the modulation according to equations (1), (2) and (3). Alternatively, the time ratio, the “rich” time ratio and the “lean” time ratio may be obtained in relation to an integer (including 1) times the period T1. Since the output of the O₂ sensor 22 or the O₂ sensor 220 with a catalyst varies periodically, according to the period of the modulation, the time ratio, the “rich” time ratio and the “lean” time ratio may be obtained in relation to the period T1 of the modulation or an integer times the period T1 (2T1, 3T1, ...). By this, the ratio of the time for which the output of the oxygen sensor is greater than the standard value Sb for the output or of the time for which it is ~~smaller~~smaller than the standard value Sb for the output to the time as a whole or a value correlating with this ratio can be properly obtained, so that the difference between the average exhaust A/F ratio and the target A/F ratio, namely how much the average exhaust A/F ratio departs from the target A/F ratio can be detected accurately, so that the exhaust A/F ratio can be adjusted properly.